

ADDENDUM No. 1 TO FACT SHEET
(Individual Construction Stormwater NPDES Permit – WWTP)
Permit No. WA-003204-2
King County, Department of Natural Resources and Parks,
Wastewater Treatment Division

The fact sheet for the original Washington State Individual Construction Stormwater NPDES Discharge Permit No. WA-003204-2 was issued on March 17, 2005. King County submitted three requests to have their permit modified on June 8, 2006; June 12, 2006; and June 19, 2006. The following revisions are made as major modifications.

PROPOSED MODIFICATIONS FOR THE PERMIT

pH Effluent Limitation for Discharges to Ground Water

On June 8, 2006, and June 19, 2006, King County requested that the pH limit for discharges to ground water be changed from the existing permit limit of 6.5 to 8.5 standard units to the background pH level of the ground water at the Route 9 site. The existing pH limit in the NPDES permit is based on Chapter 173-200 of the Washington Administrative Code (WAC) entitled, “Water Quality Standards for Ground Waters of the State of Washington.” Per Table 1 in WAC 173-200-040, the ground water quality criterion for pH is listed as 6.5 - 8.5. At the time of permit application and subsequent permit development, information regarding background groundwater pH levels was not supplied to Ecology. Therefore, the pH limit was set in the permit per the ground water quality criterion listed in WAC 173-200-040.

Recently, the County conducted sampling of the existing groundwater conditions and the analysis revealed that the existing ground water quality pH level does not meet the ground water quality criteria for secondary contaminants as listed in Table 1, WAC 173-200-040. Specifically, the existing background ground water quality for pH is less than 6.5 standard units. According to WAC 173-200-050 (3)(b)(i), “when the natural ground water quality for a contaminant exceeds the criterion, the enforcement limit for that contaminant shall be equal to the natural level.” In addition, WAC 173-200-050 (3)(b)(ii) allows enforcement limits to be set at the background ground water quality level, when the background water quality exceeds a criteria. The rationale for this regulation is further supported in Ecology’s “Implementation Guidance for the Ground Water Quality Standards” where it is stated, “....the permittee should not be held responsible for the ground water quality which is inherited.”

Background ground water quality can vary seasonally and therefore enforcement limits will vary over time. In order to ascertain the groundwater background water quality levels over time, a requirement to monitor background water quality at a minimum frequency of at least once a month has been added. When a background groundwater measurement is taken, it shall occur concurrently with a point of discharge measurement. Until background ground water quality values for pH can be determined by employment of a statistically valid approach, interim limits will be required. A statistically valid approach to evaluate ground water quality data delineates the difference between a statistically significant increase in pollution and natural background variability in water quality. The interim limits are in effect for 18 months from the time of permit

modification and are equal to background ground water quality pH values plus or minus 0.5 standard units to account for variation in sampling methods and natural variation in the environment. Background groundwater pH shall be monitored monthly from monitoring wells located upgradient hydraulically from the facility. At the end of the 18-month interim period, sampling frequency may be reduced to quarterly sampling upon written request from the Permittee and written consent from Ecology. The final pH limit range for discharges to ground water shall be determined by employment of appropriate statistical methods (described in Appendix E., Implementation Guidance for the Ground Water Quality Standards) to calculate an upper and lower pH tolerance limit. The upper and lower tolerance limits are derived from the tolerance interval. Background water quality is statistically defined as the 95 percent tolerance interval with a 95 percent confidence. The definition means we are 95 percent confident that at least 95 percent of the distribution is less than the calculated value for the upper tolerance limit, and 95 percent confident that at least 95 percent of the distribution is greater than the calculated value for the lower tolerance limit. This creates a tolerance interval which contains an average of 95 percent of the distribution with a probability of 95 percent. The upper tolerance limit calculated for pH will be the final pH limit for the upper limit of the pH range, and the lower tolerance limit calculated for pH will be the final pH limit for the lower limit of the pH range. The pH limit range shall be determined prior to the end of the interim period. Ecology's guidance document entitled, "Implementation Guidance for the Ground Water Quality Standards" shall be used in determining final background pH levels. For the interim and final pH limits, the background groundwater pH levels shall be reported monthly on the DMR forms along with the point of discharge values.

Additional Discharge Locations

On page two of the construction stormwater NPDES permit, there are six outfalls (001 – 006) listed for discharges to Little Bear Creek. An additional Outfall 007 is also included for a discharge to ground water. On June 19, 2006, King County requested that seven additional discharge locations (Outfalls 008 – 014) be added to Permit No. WA-003204-2. (See the attached figure.) This request is based on the need to discharge the dewatering water closer to the area where the dewatering withdrawals will occur in order to avoid construction conflicts that would be caused by piping the dewatering water long distances to the already permitted locations. The receiving water for these additional discharges would be the un-named tributaries of Little Bear Creek (i.e. discharges to surface waters) that will be placed into either a north or south diversion pipe around the construction site. The monitoring plan shall be updated to reflect the necessary monitoring requirements associated with these new discharges.

The additional discharge locations/outfalls and associated latitudes and longitudes are as follows.

Outfall 008	Latitude N 47-47-28	Longitude W 122-08-23
Outfall 009	Latitude N 47-47-26	Longitude W 122-08-23
Outfall 010	Latitude N 47-47-23	Longitude W 122-08-22
Outfall 011	Latitude N 47-47-17	Longitude W 122-08-22
Outfall 012	Latitude N 47-47-15	Longitude W 122-08-21
Outfall 013	Latitude N 47-47-12	Longitude W 122-08-21
Outfall 014	Latitude N 47-47-10	Longitude W 122-08-22

The effluent limitations for discharges to surface waters as indicated on page seven of the permit apply to these new discharges. This is consistent with the effluent limitations for the existing Outfalls 001 - 006. The Monitoring Schedule on page nine (i.e. Table C.1 Discharges to Surface Waters) has been modified to include monitoring of dewatering waters that are discharged to surface waters for the parameters of pH, turbidity, and total petroleum hydrocarbons to be consistent with waters discharged to surface waters.

PUBLIC NOTICES

The proposed changes in this permit are considered to constitute a major modification under 40 CFR 122.63. Thus, the changes made in the above-referenced permit are required to be published for a 30-day public review and comment period. A Public Notice of Modification (PNOM) was published on July 17, 2006, in the *Seattle Times/Post-Intelligencer* and *Everett Herald* to inform the public that a draft modification to the permit and an Addendum No. 1 to the fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft modification. The draft modification to the permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 am and 5:00 pm weekdays, by appointment, at the regional office listed below.

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

Any interested party was allowed to comment on the draft permit modifications or request a public hearing on the draft permit modifications within the thirty (30)-day comment period to the address above. The request for a hearing should indicate the interest of the party and reasons why the hearing is warranted.

Further information may be obtained from the Department by telephone, (425) 649-7103, or by writing to the address above. The modifications to the permit and the Addendum No. 1 to the fact sheet were written by Mark C. Henley, P.E.

Responsiveness Summary to Permit Modification

The Department did not receive any comments during the public comment for this permit modification.